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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,360	08/15/2001	Roy F. Brabson	RSW920010057US1	3431
7590	10/21/2004		EXAMINER	
Jerry W. Herndon IBM Corporation T81/503 PO Box 12195 Research Triangle Park, NC 27709			TRAN, NGHI V	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,360	BRABSON ET AL.	

Examiner	Art Unit	
Nghi V Tran	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 August 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) 1-3 and 5-10 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Interpretations

2. In claims 1-10, the applicant wrote, "determining, when...whether... if so" (emphasis added) in claim 1. There are two possible occurrences for the "if" or "when" condition. The "if" or "when" condition is either TRUE or FALSE. The limitation, "adding link...this connectivity" only occurs and have patentable weight if the condition claimed by applicant is TRUE. If the condition claimed by applicants is FALSE (or it does not occur), then any limitation associate with the "if" or "when" condition will not have any patentable weight.

The "if" or "when" limitation occurs many times in this application. For purpose of examination, the examiner only explains one specific claim interpretation as discussed above. All other "if" or "when" limitation will have the similar claim interpretations.

Claim Objections

3. Claims 1-3 and 5-10 are objected to because of the following informalities:

The applicants wrote, "determining...whether..." (emphasis added). The examiner interprets the term "whether" means an indirect question involving stated or implied alternatives; or alternative conditions or possibilities. Therefore, the examiner

reverses the right to give no patentable weight on any limitation right after the term "whether".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 2-3, 6-7, and 9-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Taking claim 2 as an exemplary claim, the applicants wrote, "when a second session endpoint resides in the different one of the topology subnets....and when the second session endpoint does not reside in the different one of the topology" (emphasis added) in lines 3-10. The examiner interprets the term "and" means logical operator that requires both of two conditions to be met for an output to be made or a statement to be executed. It is impossible to have both claimed conditions occurred at the same time (i.e. "second session endpoint resides in the different one of the topology subnets and the second session endpoint does not reside in the different one of the topology"). For the purpose of examination, the examiner will interpret that only one of the above two conditions will occur at a given time.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph because it depends on claim 2.

Claims 6-7 and 9-10 also rejected for the same reason set forth in claims 2-3 above.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Taking claim 1 as an exemplary claim, the functional limitation of the phrase "determining, when...subnets, whether the first..." ("GVRN"), and adding...this connectivity if so;" (emphasis added) in lines 7-9 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph because it depends on claim 1.

Claims 5-10 are also rejected for the same reason set forth in claims 1-3 above.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Li, U.S.

Patent Number 6,751,220.

Taking claims 1 as an exemplary claim, Li teaches a method of improving connectivity among topology subnets using a common connection network, comprising steps of:

- determining, by a border node located at a border of a particular one of the topology subnets, one or more links between the border node and a neighboring border node located at the border of a different one of the topology subnets (item 12, figure 1; and column 3, lines 15-25);
- creating a list of the determined links (column 1, lines 21-30; and figure 3);
- determining, when a first session endpoint resides in the particular one of the topology subnets, whether the first session endpoint has connectivity to a global virtual routing node ("GVRN"), and adding link information to the created list to represent this connectivity if so (figure 2-4; and column 1, lines 58-62); and
- forwarding the created list to the neighboring border node (column 3, lines 25-40; and column 4, lines 40-45).

With respect to claim 2, Li further teaches the steps of:

- receiving, at the neighboring border node, the created list (column 2, lines 3-15; and step 500 of figure 5);

- when a second session endpoint resides in the different one of the topology subnets, performing steps of (step 506 to step 508 of figure 5; and column 7, lines 45-59):
 - determining whether the second session endpoint has connectivity to the GVRN or to another GVRN, and adding link information to the created list to represent this connectivity if so (column 7, lines 39-45; column 6, lines 3-35; and figure 4); and
 - using the created list to select a data transmission path between the first session endpoint and the second session endpoint (see VPN Address table, column 6; and step 508 of figure 5); and
- when the second session endpoint does not reside in the different one of the topology subnets, performing steps of (step 506 to step 510 of figure 5):
 - determining, by the neighboring border node, one or more links between the neighboring border node and a different border node located at the border of another one of the topology subnets (step 512 of figure 5); and
 - forwarding the created list to the different border node (step 522 of figure 5).

With respect to claim 3, Li further teaches the step of using the created list to select a data transmission path further comprises the step of checking to see if both the first session endpoint and the second session endpoint have connectivity to a single GVRN, and if so, determining whether selecting the GVRN as a node in the data

transmission path results in an optimal data transmission path (column 5, lines 44-49; column 8, lines 10-30; and see claim 14).

Claims 4-10 are also rejected for the same reason set forth in claims 1-3 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. "Internet protocol virtual private network realization using multi-protocol label switching tunnels," by Casey et al., U.S. Patent Number 6,205,488.
- b. "Method for providing quality of service for delay sensitive traffic over IP networks," by Doshi et al., U.S. Patent Number 6,529,499.
- c. "Technique for providing dynamic modification of application specific policies in a feedback-based, adaptive data network," by Natarajan et al., U.S. Patent Number 6,765,864.
- d. "Method and apparatus for defining and implementing high-level quality of service policies in computer networks," by Gai et al., U.S. Patent Number 6,167,445.
- e. "Communication system, communication control method and control program storage medium," by Kawakami, U.S. Patent Application Publication 2001/0044842.
- f. "Aggregation of data flows on switched network paths," by Feldman et al., U.S. Patent Number 6,069,889.
- g. "Methods and apparatus for managing a flow of packets using change and reply signals," by Waclawsky et al., U.S. Patent Number 6,628,610.

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h. "Methods and apparatus for routing packets using policy and network efficiency information," by Ma et al., U.S. Patent Number 6,775,280.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Examiner
Art Unit 2151

NT



ZARNI MAUNG
PRIMARY EXAMINER